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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,014	09/20/2001	Richard Francis Russell	2001-0158.02	3768

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 04/26/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/957,014

Applicant(s)

RUSSELL ET AL.

Examiner

Noreen Moiduddin

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

1. This communication is in response to Request for Continued Examination (RCE) filed under 37 CFR 1.114 on 4/07/04, claims 1, 11 and 17 were amended, claims 1-25 remain pending and have been examined.

***Claim Rejections - 35 USC § 101***

2. Claims 1 and 11 are rejected under 35 U.S.C. §101, which reads as follow:

Whoever invents or discover any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

Claims 1 and 11 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject mater. In this case, computer-related invention whether descriptive or functionally descriptive material are non0-statutory categories when claimed as descriptive material per se (*Warmerdam, 33 F. 3d at 1360 USPQ2d at 1759*), falling under the process category (i.e. inventions at the consists of a series of steps or acts to be performed. See 35 U.S.C. 100(b) ("The term process means, art or method, and includes a new of a known process, machine, manufacture, composition of matter or material). Functional descriptive material, "data structures" representing descriptive material per se or computer program representing computer listing per se when embodied in a computer-readable media are still not statutory and functional interrelationships between the data structure and the computer software and hardware component which permit the data structure' functionality to be realized and is thus statutory (see MPEP §2106).

***Claim Rejections - 35 USC § 102***

3. Quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action may be found in previous office action.

4. Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Cheshire, S. Current Meeting Report, Cheshire et. al. (Cheshire), 03/1999.

Regarding claim 1, Cheshire discloses an auto-configuration IP assignment to new devices, the method including the steps of:

a computer node communicatively coupled on a LAN network and a network ("adapter") interface to communicatively coupling a device to said network (page 2), said computer performing the steps of:

incorporating a randomly generated internet protocol address in an address resolution protocol (ARP) probe (page 3);

said (LAN) network providing communicatively interconnection between said computer and said network adapter (pages 2-3);

sending said ARP probe (i.e. broadcast query) on said network for verify whether a response (by a communicatively coupled recipient) to said ARP probe indicates that said internet protocol address is in use or not (page 3); and

if said internet protocol address is not in use, then assigning said internet protocol address to said network interface via said (LAN) network (page 3).

5. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire in view of Reed et. al. (Reed) U.S. Patent No. 6,061,739.

Regarding claim 2-5, iterating i.e. repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (Cheshire page 3), however Stuart does not explicitly teach wherein the predetermined number is 30;

Reed teaches a first host computer incorporating a generating an internet protocol address in a address resolution protocol probe broadcast request (col 2/lines 20-30),

sending said address resolution on an Ethernet LAN network for determining if an internet protocol address is in use (col 2/lines 20-30);

wherein the number of requests is a preset threshold (col 4/lines 19-20) and first specified time interval to wait for a response are programmable values (col 5/lines 28-33);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include means for repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (e.g. 30), motivation would be to program the number of request issues and the time to wait for a response based on network environment factors such as network latency and its dependency on network traffic, distance and the characteristic of the communication links.

Regarding claim 6, if said number of times said generating step is performed exceeds said predetermined number then said computer fails to automatically assign said network adapter an internet protocol address (Cheshire: page 3).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire in view of Reed in further view of Mellquist U.S. Patent No. 6,115,545.

Regarding claim 7, although prior art discloses sending an ARP probe message (i.e. "broadcasting discovery packet") on said network; and determining if said network adapter has a "valid" internet protocol address, it does not explicitly teach determining if internet protocol address is valid

Mellquist teaches that in order to configure a device with an internet protocol address it is required that a free address in the range of valid unique addresses must be selected and that a sub-net mask having a mask that must be the same on all entities across the sub-net is required (col 3/lines 11-19);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to ensure that a unique valid internet address is used to configure a network device, as taught by the reference, where such validation includes verifying that an internet protocol address having the same mask as all entities on the subnet, motivation would be verify that applied address meet all requirements that ensure proper operation, to avoid major problems as suggested by Mellquist.

7. Claims 8-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire-Reed in view of Mellquist U.S. Patent No. 6,115,545 in further view of Request for Comments (2563), Troll, May 1999

Regarding claim 8, however the above-mentioned prior art of record does not explicitly teach determining whether said network allows said computer to assign an internet protocol address to network devices, prior to generating step;

Troll teaches client nodes configured to be able to determine whether or not the network is being centrally administrated, allowing it determine whether or not it should assign itself a IP (link-local) address (page 2), including an Auto-configure option which allows a computer node to determine whether or not it should generate an IP address (page 3) (i.e. prior to performing the generating step).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize the Troll teachings to implement determining whether said network allows said computer to assign an internet protocol address to said network adapter, motivation would be to enable the flexibility of an

Auto-configure Option along with the IP address assignment that notifies the client that the network does not have an IP address to offer upon determining the absence of an DHCP server.

Regarding claim 9, said device is a printer (Cheshire: page 5).

Regarding claim 10, said network adapter is a ("low-cost") network interface (adapter)(Cheshire: page 3).

Regarding claim 11, this claim is substantially the same as claims 1 and 7 as discussed above, same rationale of rejection is applicable.

Regarding claim 12, wherein if said internet protocol address is in use, then further comprising the step of repeating said generating step, said incorporating step, said sending step and said determining step (Cheshire, page 3).

Regarding claims 13-16, these claims are substantially the same as claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claim 1, this claim comprised a network based ("imaging") system, including limitations on claims 1-10 when combined including the instructions executable on a computer to perform the method steps disclosed on the method claims 1-10, same rationale of rejection is applicable.

Regarding claims 18-22, these apparatus (system) claims are substantially the same as the method claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claims 23-24, these apparatus (system) claims are substantially the same as claims 7-8 respectively, same rationale of rejection is applicable.

Regarding claim 25, this apparatus (system) claim is substantially the same as the method claim 10, same rationale of rejection is applicable.

*Response to arguments*

8. Applicant argues the prior art of record does not teach claim limitation as amended, specifically, a network that communicatively interconnects between said computer and said network adapter, because according to applicant's interpretation of the Cheshire reference, Cheshire discloses a self configuration process in which a random address is picked, an ARP probe is sent to verify that the address is not in use and if it is not, an interface is configured with an IP address.

In response to the above-mentioned argument, applicant's attention is directed to summary of the invention page 2, lines 15-24 and to the definition of the term "network" (see attached), a network communicatively interconnects or provides communication facilities between a group of computers and devices (e.g. printers) coupled or on the network, the interconnection facilities are e.g. cable, telephones connections or other communication links. Furthermore, a "network adapter" (see attached) connects a computer or device to the network. There is no novelty, nor is the applied reference overcome by adding to a claim that "a network communicatively interconnects between computers, and the network adapter of a device, because that is what a network does.

Cheshire teaches a LAN network provides communicative interconnection between said computer and said network adapter, i.e. a "home" LAN comprises client, a computer interconnected enjoying the basics connectivity (i.e. communicatively connected) to other systems and services on the network, where the LAN is further connected to the Internet (see page 2). LAN further including an interface to be configured with an IP address, a DHCP server communicatively coupled on the LAN and communicating with the computer on which a Mac OS is running, see page 3). The Cheshire reference cannot send the probe applicant's refers to and/or expect or receive a response from another computer or device on the LAN, if these were not communicatively connected through the LAN.

9. Applicant's arguments filed 04/07/07 has been fully considered but not rendered persuasive.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (703) 305-9705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231


or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry;

Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".

  
B. Prieto  
TC 2100  
Patent Examiner  
April 23, 2004